

IN THE CLAIMS

Please amend the claims as follows.

1. (previously presented) A discrete package comprising:
a lead frame pad which has a first surface and a second surface, the second surface which is the opposite surface of the first surface;
leads connected to a side of the lead frame pad;
a semiconductor chip attached to the first surface of the lead frame pad;
a ceramic layer having a first and second surface and which is positioned to directly contact the second surface of the lead frame pad; and
a molding material which entirely encapsulates the lead frame pad, the semiconductor chip, and a portion of the ceramic layer, except the leads and the second surface of the ceramic layer.
2. (previously presented) The discrete package of claim 1, wherein the leads are stepped with respect to the lead frame pad.
3. (original) The discrete package of claim 1, further comprising wires which electrically connect the leads to the semiconductor chip.
4. (original) The discrete package of claim 1, wherein the lead frame pad is formed to a thickness of 0.5 mm.
5. (original) The discrete package of claim 1, further comprising an adhesive between the lead frame pad and the semiconductor chip.
6. (previously presented) A discrete package comprising:
a lead frame pad which has a first surface and a second surface, the second surface which is the opposite surface of the first surface;
leads which are connected to a side of the lead frame pad;
a semiconductor chip which is attached to the first surface of the lead frame pad;

a ceramic layer having a first and second surface and which is directly attached to the second surface of the lead frame pad via an epoxy; and

a molding material which entirely encapsulates the lead frame pad, the semiconductor chip, and a portion of the ceramic layer, except the leads and the second surface of the ceramic layer.

7. (previously presented) The discrete package of claim 6, wherein the leads are stepped with respect to the lead frame pad.

8. (original) The discrete package of claim 6, further comprising wires which electrically connect the leads to the semiconductor chip.

9. (original) The discrete package of claim 6, wherein the lead frame pad is formed to a thickness of 0.5 mm.

10. (original) The discrete package of claim 6, further comprising an adhesive between the lead frame pad and the semiconductor chip.

11. (previously presented) A discrete semiconductor package, comprising:
a lead frame having a first surface and a second surface with a lead connected to the lead frame;
a semiconductor chip attached to the first surface of the lead frame;
a ceramic layer having a first surface and a second surface, wherein the first surface of the ceramic layer is directly attached to the second surface of the lead frame; and
a molding material which encapsulates the lead frame, the semiconductor chip, a portion of the lead, and the ceramic layer except for the second surface.

12. (original) The package of claim 11, wherein the first surface of the ceramic layer does not contain a conductive layer.

13. (original) The package of claim 11, wherein the ceramic layer is attached to the lead frame by using the molding material.

14. (currently amended) A discrete semiconductor package, comprising:
a lead frame having a first surface and a second surface with a lead connected to the lead frame;
a semiconductor chip attached to the first surface of the lead frame;
a ceramic layer having a first surface and a second surface, wherein the first surface of the ceramic layer is directly attached to the second surface of the lead frame ~~via an epoxy~~ without using an adhesive; and
a molding material which encapsulates the lead frame, the semiconductor chip, a portion of the lead, and the ceramic layer except for the second surface.

15. (currently amended) An electronic apparatus containing a packaged semiconductor device, the device comprising:
a lead frame having a first surface and a second surface with a lead connected to the lead frame;
a semiconductor chip attached to the first surface of the lead frame;
a ceramic layer having a first surface and a second surface, ~~wherein the first surface of the ceramic does not contain a conductive layer and is attached to the second surface of the lead frame~~; and
a molding material which encapsulates the lead frame, the semiconductor chip, a portion of the lead, and the ceramic layer except for the second surface;
wherein the ceramic layer is attached to the lead frame using only the molding material.

16. (original) The apparatus of claim 15, wherein the first surface of the ceramic layer is directly attached to the second surface of the lead frame.

17. (currently amended) The apparatus of claim 15, wherein the first surface of the ceramic layer does not contain a conductive layer ~~is attached to the lead frame by using the molding material.~~

18. (canceled).

19. (currently amended) A method for making a packaged semiconductor device, comprising:

providing a lead frame having a first surface and a second surface with a lead connected to the lead frame;

providing a semiconductor chip attached to the first surface of the lead frame;

providing a ceramic layer having a first surface and a second surface, ~~wherein the first surface of the ceramic does not contain a conductive layer and is attached to the second surface of the lead frame;~~ and

providing a molding material which encapsulates the lead frame, the semiconductor chip, a portion of the lead, and the ceramic layer except for the second surface;
wherein the ceramic layer is attached to the lead frame by using only the molding material.

20. (currently amended) A method for making a packaged semiconductor device, comprising:

providing a lead frame having a first surface and a second surface with a lead connected to the lead frame;

attaching a semiconductor chip to the first surface of the lead frame; and

attaching a first surface of a ceramic layer to the second surface of the lead frame;
~~wherein the first surface of the ceramic layer does not contain a conductive layer; and~~
by encapsulating the lead frame, the semiconductor chip, a portion of the lead, and the ceramic layer except for the second surface.

21. (original) The method of claim 20, further comprising directly attaching the first surface of the ceramic layer to the second surface of the lead frame.

22. (original) The method of claim 20, wherein the encapsulation is performed using a molding material.

23. (currently amended) The method of claim 22, ~~further comprising attaching wherein the first surface of the ceramic layer does not contain a conductive layer to the lead frame by using the molding material .~~

24. (canceled)

25. (currently amended) A method for making an electronic apparatus, comprising:
providing a packaged semiconductor device by providing a lead frame having a first surface and a second surface with a lead connected to the lead frame, attaching a semiconductor chip to the first surface of the lead frame, and attaching a first surface of a ceramic layer directly to the second surface of the lead frame, ~~wherein the first surface of the ceramic layer does not contain a conductive layer, and~~ by encapsulating the lead frame, the semiconductor chip, a portion of the lead, and the ceramic layer except for the second surface;
providing an outer heat sink; and
connecting the packaged semiconductor device to the outer heat sink.

26. (new) The method of claim 19, wherein the first surface of the ceramic layer does not contain a conductive layer.

27. (new) The method of claim 25, wherein the first surface of the ceramic layer does not contain a conductive layer.